

Application Number 09/867,363

Responsive to Office Action mailed October 17, 2005

REMARKS

This Amendment is responsive to the Office Action dated October 17, 2005. Applicants have amended claims 1, 10, 11, 17, 26, 27, 33, 42, 43, 49, 57 and 65. Claims 1-72 remain pending.

The Office Action rejected claims 49, 57 and 65 under 35 U.S.C. 102(e) as being anticipated by Granstam (US 6,587,691); rejected claims 1-5, 7-9, 11-13, 16-21, 23-25, 27-29, 32-37, 39-41, 43-45 and 48 under 35 U.S.C. 103(a) as being unpatentable over Granstam in view of Koilpillai (US 6,678,508); rejected claims 6, 22 and 38 under 35 U.S.C. 103(a) as being unpatentable over Granstam and Koilpillai, and further in view of Deschepper (US 6,094,700)¹; rejected claims 10, 26 and 42 under 35 U.S.C. 103(a) as being unpatentable over Granstam and Koilpillai and further in view of Eber (US 6,595,414); rejected claims 14, 15, 30, 31, 46 and 47 under 35 U.S.C. 103(a) as being unpatentable over Granstam and Koilpillai and further in view of Timonen (US 6,741,848); rejected claims 50-53, 56, 58-61, 64, 66-69 and 72 under 35 U.S.C. 103(a) as being unpatentable over Granstam in view of Koilpillai (US 6,678,508); and rejected claims 54, 55, 62, 63, 70 and 71 under 35 U.S.C. 103(a) as being unpatentable over Granstam in view of Timonen.

Applicants respectfully traverse the rejections to the extent such rejections may be considered applicable to the amended claims. The applied references fail to disclose or suggest the inventions defined by Applicants' claims, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed invention.

Applicants believe that the applied prior art (either alone or in combination) fails to disclose or suggest the features of Applicant's claims. Nevertheless, Applicants' have amended the current claims to clarify the invention and even further distinguish the applied references. Applicants have also amended several claims for clarity purposes unrelated to patentability, e.g., to clarify that SIM stands for "subscriber identity module." Each of the independent claims are addressed in detail below.

¹ Applicants note that the Office Action actually cited Deschepper as US Patent 6,741,848. However, US Patent 6,741,848 was awarded to Timonen et al., not Deschepper. Applicants have noted this same discrepancy in the

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Claims 1, 17 and 33

Claims 1, 17 and 33 require the supply of power or the termination of power to a SIM based on whether a request is pending for service by the SIM or the device requests maintenance of power to the SIM. In this manner, the power management techniques recited in Applicants' claims 1, 17 and 33 permit power conservation within a wireless communication device (WCD) without undermining SIM performance. In accordance with claims 1, 17 and 33, power is terminated to the SIM when no request is pending for service by the SIM and no software module running on the WCD requests maintenance of power to the SIM.

Furthermore, claims 1, 17 and 33 have each been amended to clarify that the claimed invention requires management of power to a subscriber identity module (SIM) in a wireless communication device (WCD) when power is supplied to the WCD during operation of the WCD. Thus, the power management features of claims 1, 17 and 33 apply when power is supplied to the WCD, and are distinguished from sleep mode techniques in which power to the WCD is disabled.

The Office Action cited Granstam as disclosing a the control of power to a SIM. The Office Action recognized that Granstam fails to disclose or suggest supplying power to the SIM when a request is pending for service by the SIM, or supplying power to the SIM when a software module running on the WCD requests maintenance of power to the SIM, or terminating power to the SIM when no request is pending for service by the SIM and no software module running on the WCD requests maintenance of power to the SIM. However, the Office Action construed Koilpillai as disclosing these features, and concluded that a person of ordinary skill in the art would have been motivated to modify the techniques taught in Granstam with those of Koilpillai to arrive at Applicants' claimed invention.

There are several errors in the analysis of the Office Action. First, contrary to the conclusions advanced in the Office Action, Granstam does not disclose power control techniques applicable to a SIM. The cited passages of Granstam, for example, appear to teach nothing more than the fact that SIMs were known. Applicants' claims are not so broad as to cover a conventional SIM, but rather require a power management technique that provides power to the SIM and terminates power to the SIM based no specific contingencies recited in the claim. None

previous two responses. For purposes of this response, Applicants' assume that the Office Action meant to cite Deschepper et al. (US Patent 6,094,700) in this rejection.

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of the references disclose or suggest the specific power management techniques recited in claims 1, 17 and 33.

Second, the Koilpillai reference does not teach anything with respect to SIMs, whatsoever. Instead, Koilpillai describes conventional power conservation techniques in which a WCD (not a SIM) is put into a sleep mode. As described in Koilpillai, the WCD cycles in and out of sleep mode when it is not involved in a call. In sleep mode, the receivers and transmitters of Koilpillai are disabled.

The obviousness analysis of the Office Action appears to rely on observations that Granstam teaches the use of SIMs, and Koilpillai teaches a sleep mode algorithm for a WCD. Apparently, the Office Action concluded that these teachings would have led a person of ordinary skill in the art to modify a WCD that includes a SIM to provide some type of sleep mode applicable to the SIM. Based on this, the Office Action appears to have concluded that the features of claims 1, 17 and 33 would have been obvious to a person of ordinary skill in the art in view of the combined teachings of Granstam and Koilpillai.

Contrary to Applicants' claims, Koilpillai teaches a sleep mode algorithm for a WCD in which receivers and transmitters are disabled, and not a technique for terminating power to a SIM when power is supplied to the WCD. Indeed, Koilpillai is completely silent with respect to SIMs, and does not disclose or suggest any sleep mode techniques applicable to the SIM when power is supplied to the WCD. Therefore, contrary to the analysis in the Office Action, Koilpillai fails to suggest the features recited in claims 1, 17 and 33. In particular, Koilpillai does not suggest powering a SIM and terminating power to the SIM during operation of the WCD, much less the specific contingencies required by claims 1, 17 and 33 when power is supplied to the WCD.

In short, contrary to the Office Action's analysis, Koilpillai fails to suggest supplying power to the SIM when a request is pending for service by the SIM, supplying power to the SIM when a software module running on the WCD requests maintenance of power to the SIM, and terminating power to the SIM when no request is pending for service by the SIM and no software module running on the WCD requests maintenance of power to the SIM as required by claims 1, 17 and 33. Therefore, even if Granstam were modified to incorporate the features of Koilpillai, the result would not conform to features required by Applicants' claims.

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Moreover, in order to even further clarify the distinction between Applicants' claims 1, 17 and 33 relative to Granstam and Koilpillai, these claims have been amended to require managing power to a SIM in a WCD when power is supplied to the WCD during operation of the WCD. In particular, these amendments to claims 1, 17 and 33 further distinguish Koilpillai relative to these claims insofar as Koilpillai describes sleep cycles in which power to the WCD is disabled. These amendments to claims 1, 17 and 33 should clarify that the claimed techniques concern management of power to the SIM when power is supplied to the WCD, and not power management of the WCD receivers and transmitters, as taught by Koilpillai. The amendments to claims 1, 17 and 33 find ample support throughout Applicants' specification. See e.g., paragraphs [0031], [0042] and [0051]. In addition, the description of FIGS. 1 and 2 also imply constant supply of power to modem 14 during the power management of SIM 16. Modem 14, for example, may be powered during the described processes by a different power supply. See paragraph [0036], last sentence.

In view of the foregoing comments, and the amendments to claims 1, 17 and 33, which further distinguish the applied reference, these claims should now be in condition for immediate allowance. Applicants reserve further comment with respect to the various dependent claims to claims 1, 17 and 33 not addressed herein, but do not acquiesce to the Office Action's rejections of the claims, nor the Office Action's characterizations of the prior art relative to these claims. Therefore, Applicants reserve the right to present additional arguments with respect to on or more of the dependent claims.

Claims 49, 57 and 65

Claims 49, 57 and 65 require storing a user access code associated with a subscriber identity module (SIM) in a memory associated with a wireless communication device (WCD), retrieving the user access code from the memory when power is resupplied to the SIM, and using the retrieved user access code in a security authorization process in the WCD to authorize use of secure features of the SIM. In this Amendment, these claims have been further amended to clarify that the storing of the user access code occurs in response to a user entering the access code at an initial power up of the WCD. Thus, the user access code that is "stored" and then "resupplied," according to claims 49, 57 and 65 is an access code that was entered by a user, and not merely a key which must be compared to an access code that is entered every time power is

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supplied to the SIM. These amendments also find support throughout Applicants' specification. See e.g., paragraphs [0030]-[0031] and [0050]-[0052].

The features of claims 49, 57 and 65 are particularly useful when power is terminated to a SIM for the power management techniques recited in independent claims 1, 17 and 33. In that case, following the re-initiation of power to the SIM, a user does not need to enter the code, e.g., by keypad entry. Instead, the code, having been entered by a user at an initial power up, is retrieved from memory in an automated fashion to eliminate the need for a user to enter the code when power is re-supplied to the SIM. Dependent claims 11, 27 and 43 recite features similar to those of claims 49, 57 and 65 in the context of the power management techniques recited in independent claims 1, 17 and 33. Thus, dependent claims 11, 27 and 43 should be allowed for at least the reasons outlined above with respect to independent claims 1, 17 and 33 and independent claims 49, 57 and 65.

The Office Action cited column 6, lines 19-38 of Granstam as disclosing the storage of a user access code, the retrieval of the user access code when power is resupplied to the SIM and use of the retrieved user access code in a security authorization process. However, this passage of Granstam describes nothing more than a vague description of a conventional SIM. Nothing in this passage even addresses the issue of access code reentry following a re-initiation of power to the SIM.

In accordance with claims 49, 57 and 65, the access code, having been entered by a user at an initial power up, is retrieved from memory in an automated fashion to eliminate the need for a user to enter the code when power is re-supplied to the SIM. In contrast, Granstam describes a SIM that stores a secret key for authentication. In accordance with Granstam, a user would be required to re-enter an access code each and every time power is terminated and then resupplied to the SIM. Indeed, Granstam does not even address the issues of user convenience following a re-initiation of power to the SIM.

In Granstam, if power were terminated to the SIM, and then resupplied to the SIM, the WCD would require a user to re-enter an access code. Nothing in Granstam suggests otherwise. In particular, nothing in Granstam suggests storing an access code entered by a user at an initial power up, much less the retrieval of the stored access code when power is re-supplied to the SIM to promote user convenience.

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Again, the features of claims 49, 57 and 65 are particularly useful when power is terminated to a SIM for the power management techniques recited in independent claims 1, 17 and 33. In that case, following the re-initiation of power to the SIM, a user does not need to enter the code. Instead, the code, having been entered by a user at an initial power up, is retrieved from memory in an automated fashion to eliminate the need for a user to enter the code when power is re-supplied to the SIM. Dependent claims 11, 27 and 43 recite features similar to those of claims 49, 57 and 65 in the context of the power management techniques recited in independent claims 1, 17 and 33.

None of the secondary references provides any teaching that would have led a person of ordinary skill in the art to modify the techniques of Granstam to arrive at the inventions recited in Applicants' claims.

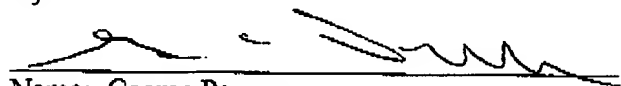
Given the fundamental differences between the pending claims and the applied references outlined above, Applicants believe that all pending claims should be allowed over the prior art of record. Accordingly, all claims in this application are in condition for allowance.

Applicants respectfully request reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 17-0026. The Examiner is invited to telephone the below-signed attorney to discuss this application.

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